

Department of Commerce § National Oceanic & Atmospheric Administration § National Weather Service

***NATIONAL WEATHER SERVICE PACIFIC REGION SUPPLEMENT 01-2004***

***APPLICABLE TO NWSI 10-1301***

***July 30, 2004***

***Operations and Services***

***Surface Observing Program NWSPD 10-1300***

***Surface Observing Program (Land), NWSI 10-1301***

***SECOND ORDER SYNOPTIC OBSERVING STATIONS IN MICRONESIA***

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**NOTICE:** This publication is available at: <http://www.nws.noaa.gov/directives/>.

**OPR:** W/PR12x1 (D. Meek)

**Certified by:** W/PR12 (K. Turner)

**Type of Issuance:** Initial

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***SUMMARY OF REVISIONS:*** None.

(Signed) \_\_\_\_\_ 07/19/04  
R. J. LaDouce Date  
Director, Pacific Region

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1. General. National Weather Service Pacific Region (NWSPR) operates a paid network of second order synoptic stations in Micronesia to support mission requirements. These stations are located on remote islands and atolls from the Republic of Marshall Islands, westward across the Federated States of Micronesia to the Republic of Palau and help fill the void in a data sparse region covering thousands of square miles.
2. Policy. This supplement is applicable only to Micronesian second order synoptic stations. These stations located in WMO Region V, follow coding practices contained in Federal Meteorological Handbook No. 2 (FMH-2), and use the symbolic code form (FM12 SYNOP) for reporting surface observations from land stations. Due to lack of infrastructure ( i.e., power, telecommunications, observing equipment), coding practices may be modified to reflect these limitations where necessary.
3. Pacific Region Headquarters (PRH). The Data Systems Branch (DSB) provides management assistance, financial resources, observer certification, equipment resources and oversight of the network.
4. Supervisory Offices. First Order Weather Service Offices (WSOs) Majuro, Pohnpei, Chuuk, Yap, and Koror are responsible for supervision of second order stations within their respective Area of Responsibility (AOR). Supervision includes site surveys, equipment installation, maintenance, and calibration, observer training and certification, observer payroll functions, station inspections, and data collection and transmission. Pacific Region Supplement 10-2003 (Station Inspection Program) lists the second order locations, supervising offices, and inspection schedules.
5. Observing Equipment at Second Order Stations. The following equipment resources are provided for each station:

- Barometer (Set to read Sea Level Pressure)
  - Anemometer (Hand Held – Read in Knots)
  - Battery operated Psychrometer (For air temperature and dew point)
  - 8 inch Standard Rain Gage
  - HF Radio (Transmission of reports to supervising office)
  - FMH-2 (Synoptic Code Manual)
  - Observational Aids (Conversion tables, charts and graphs)
  - WS Form B-15-1 (Record of 3 and 6 hourly synoptic observations)
  - Observer Supplies (Raincoat, flashlight, paper, pens, pencils, etc.)
6. Weather Service Forms B-15-1 and B-15-2 (Record of 3 and 6 Hourly Synoptic Reports). Stations shall use these forms to record, code, and archive the synoptic observations. The completed form B-15-1 will be sent to the supervising office at the end-of-each month. Supervising offices will collect the forms for payroll purposes, provide quality control checks and forward the forms monthly to the National Climatic Data Center (NCDC) at the following address:

NCDC Services Center  
Image Entry  
465 Industrial Blvd.  
London, KY 40741

7. Modified Synoptic Coding Practices. Micronesian second order synoptic stations are non 24-hour stations and in most cases staffed by a single observer. Due to staffing and equipment limitations, second order stations are authorized to modify and report the following synoptic code groups:

Section 0    Iiii  
Section 1    IrIxhVV Nddff 1SnTTT 2SnTdTdTd (3PoPoPoPo) 4PPPP (5app) (6RRRtr)  
7ww// (8NhClCmCh)  
Section 3    333 58P24P24P24 or 59P24P24P24 7R24R24R24R24 912ff  
Section 5    555 9YYGG

Groups in parentheses ( ) are optional and may or may not be reported.

8. Collection and Transmission of Synoptic Reports. Second order stations shall transmit their reports by HF radio as-soon-as completed to the supervising office. Supervising offices shall promptly collect, quality control and transmit reports from all stations in their AOR over long-line circuits in bulletin format. WSOs shall report the additional groups MiMiMjMj YYGGiw in the heading of each bulletin.

Example:

SMKA02 PTP (DTG)

AAXX 15124

91350 11474 60504 10244 20223 40123 780// 333 58008 70043 91215 555 91512=